



MARYLAND Department of Health

Public Health Preparedness and Situational Awareness Report: #2018:29

Reporting for the week ending 07/21/18 (MMWR Week #29)

July 27, 2018

CURRENT HOMELAND SECURITY THREAT LEVELS

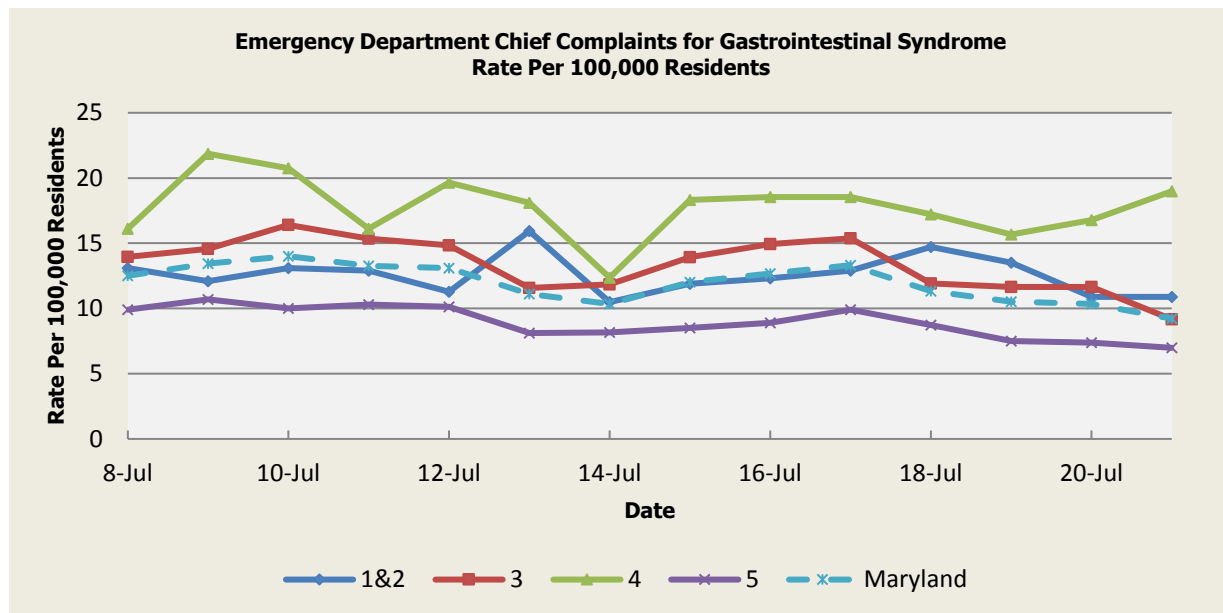
National: No Active Alerts
Maryland: **Enhanced** (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the “Other” category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2018.

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Gastrointestinal Syndrome



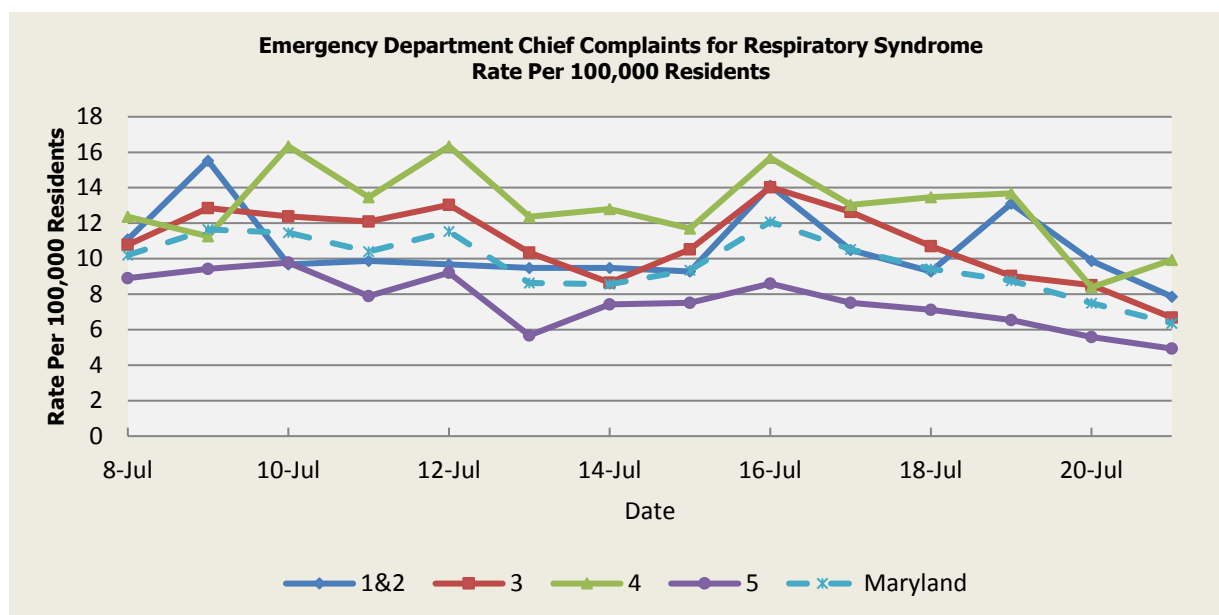
There was one (1) Gastrointestinal Syndrome outbreak this week: one (1) outbreak of Gastroenteritis associated with a Daycare Center (Region 5).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.04	15.09	15.66	10.21	13.09
Median Rate*	12.91	14.83	15.24	10.13	12.97

* Per 100,000 Residents

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Respiratory Syndrome



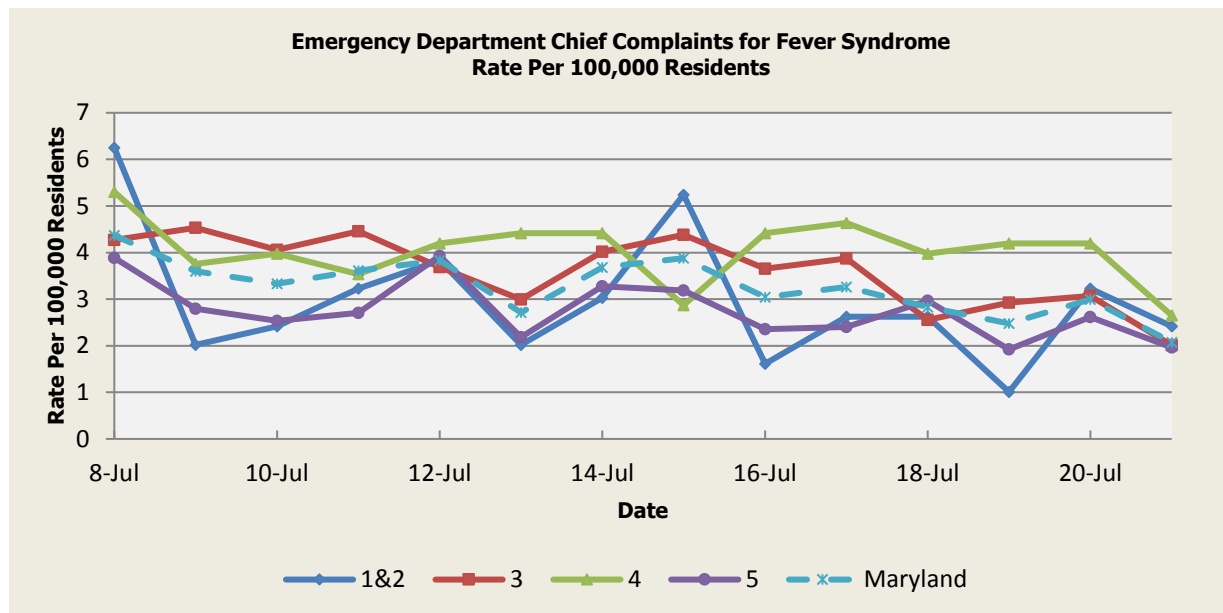
There was one (1) Respiratory illness outbreak this week: one (1) outbreak of Pneumonia in a Nursing Home (Region 3).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.37	14.62	14.78	9.95	12.66
Median Rate*	11.90	14.07	14.13	9.60	12.15

* Per 100,000 Residents

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Fever Syndrome



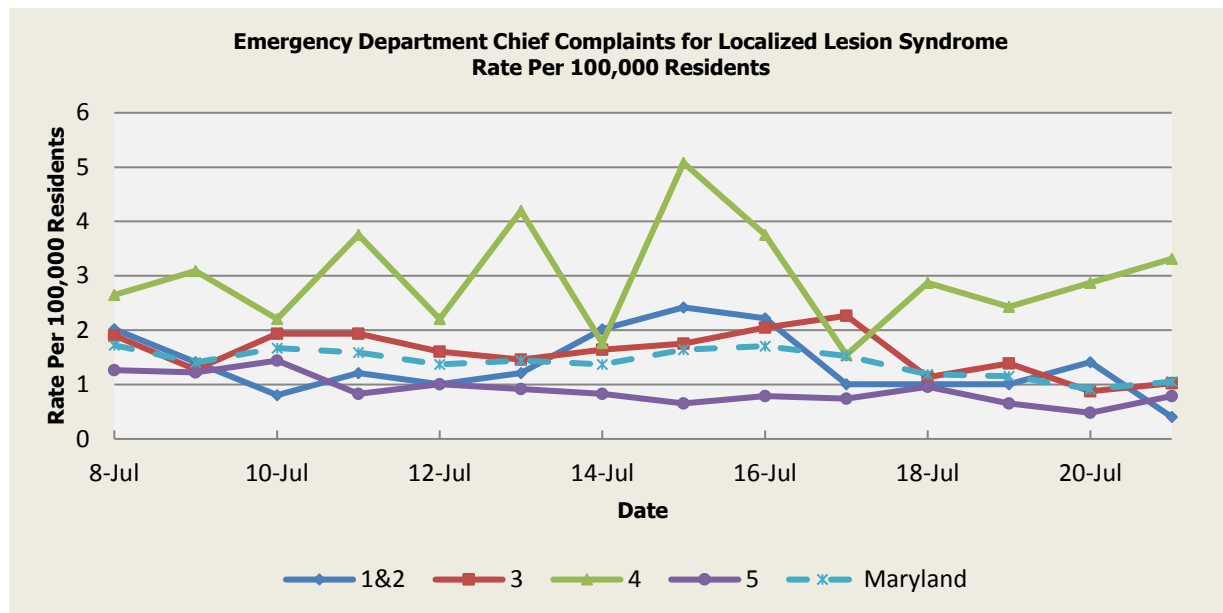
There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.00	3.88	4.03	3.04	3.50
Median Rate*	2.82	3.76	3.97	2.92	3.36

**Per 100,000 Residents*

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Localized Lesion Syndrome



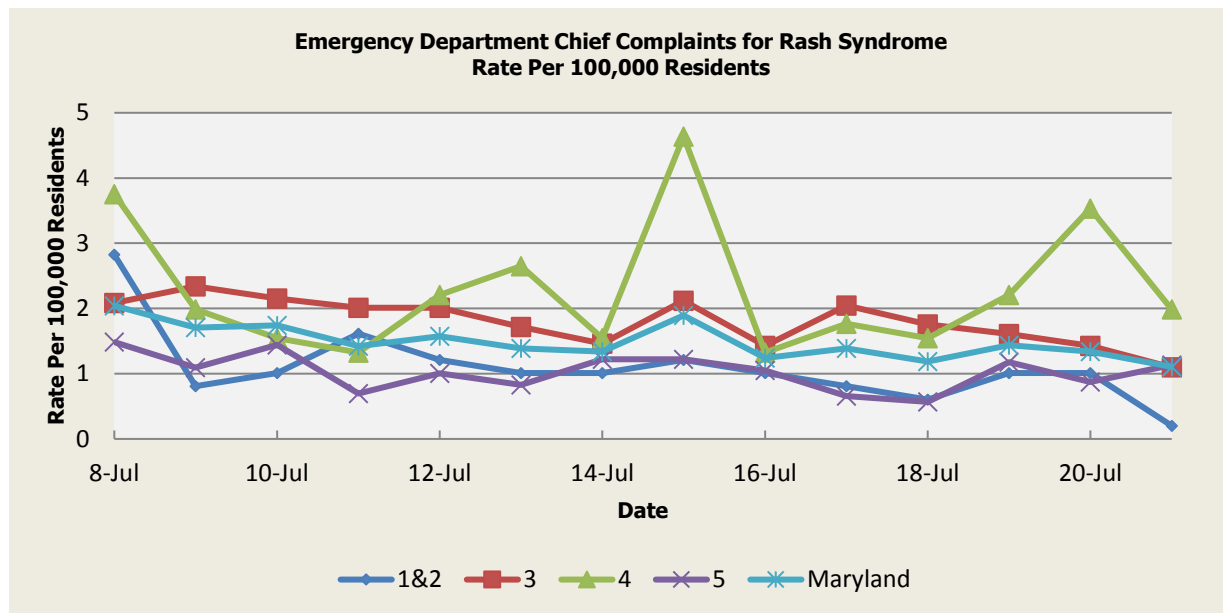
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.05	1.84	2.03	0.93	1.44
Median Rate*	1.01	1.79	1.99	0.92	1.39

* Per 100,000 Residents

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Rash Syndrome



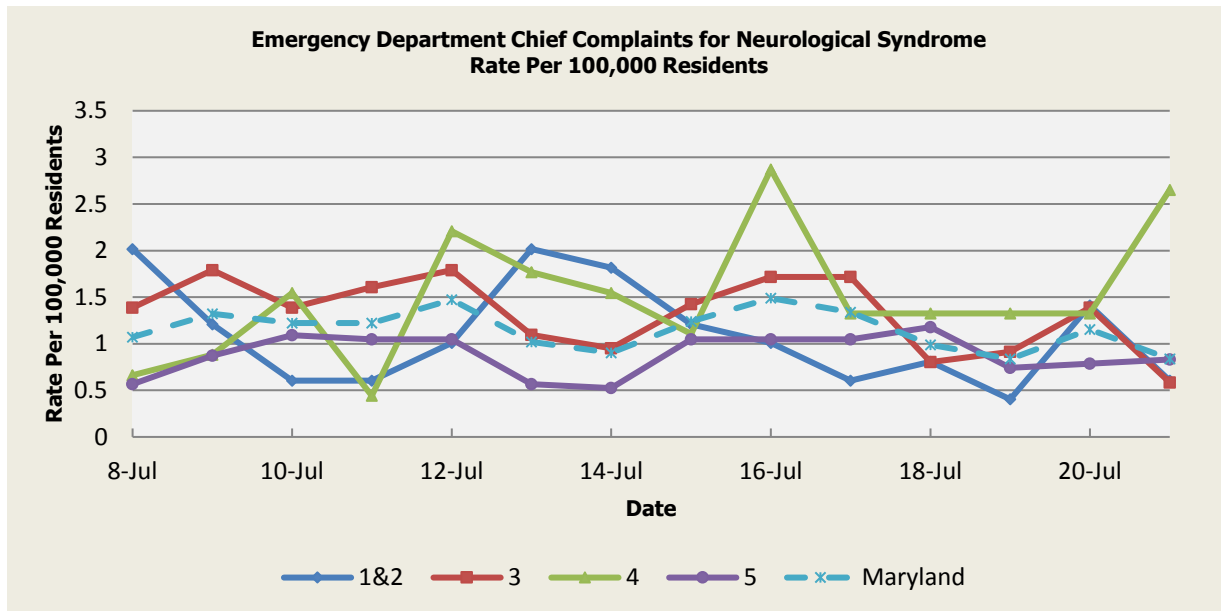
There was one (1) Rash Syndrome outbreak this week:
one (1) outbreak of Scabies associated with an Adult Day and Residential Program (Regions 1&2).

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.21	1.71	1.76	1.00	1.40
Median Rate*	1.21	1.64	1.77	0.96	1.34

* Per 100,000 Residents

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Neurological Syndrome



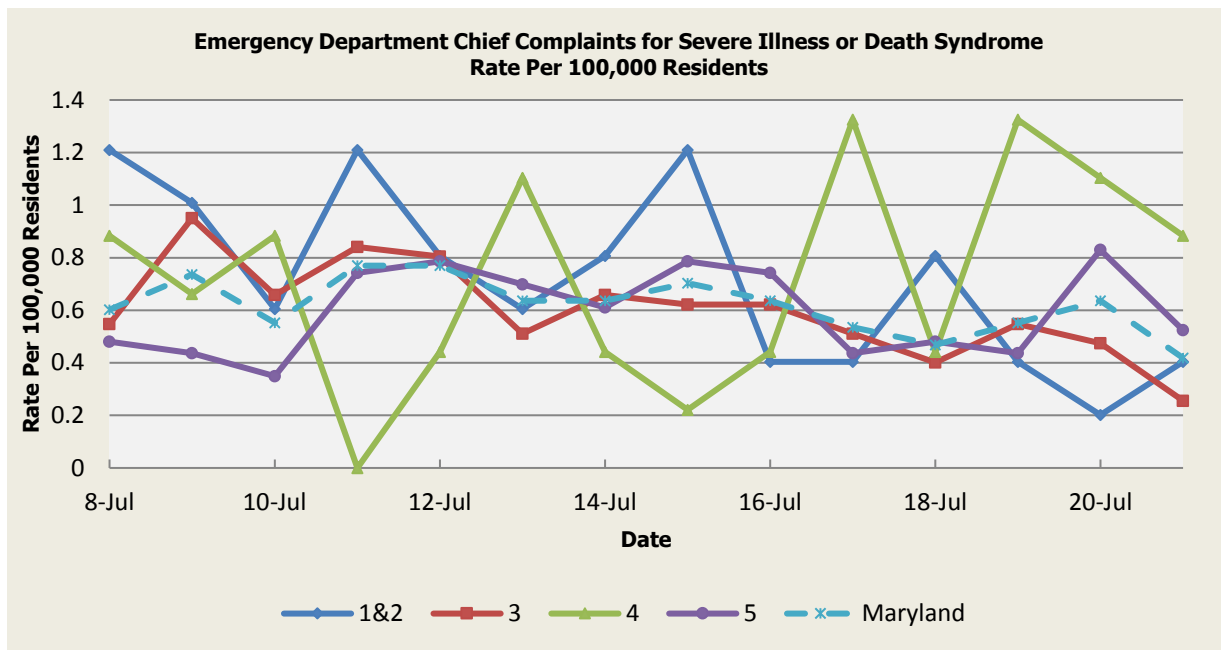
There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.72	0.88	0.79	0.56	0.74
Median Rate*	0.60	0.77	0.66	0.52	0.64

* Per 100,000 Residents

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Severe Illness or Death Syndrome



There were no Severe Illness or Death Syndrome outbreaks reported this week.

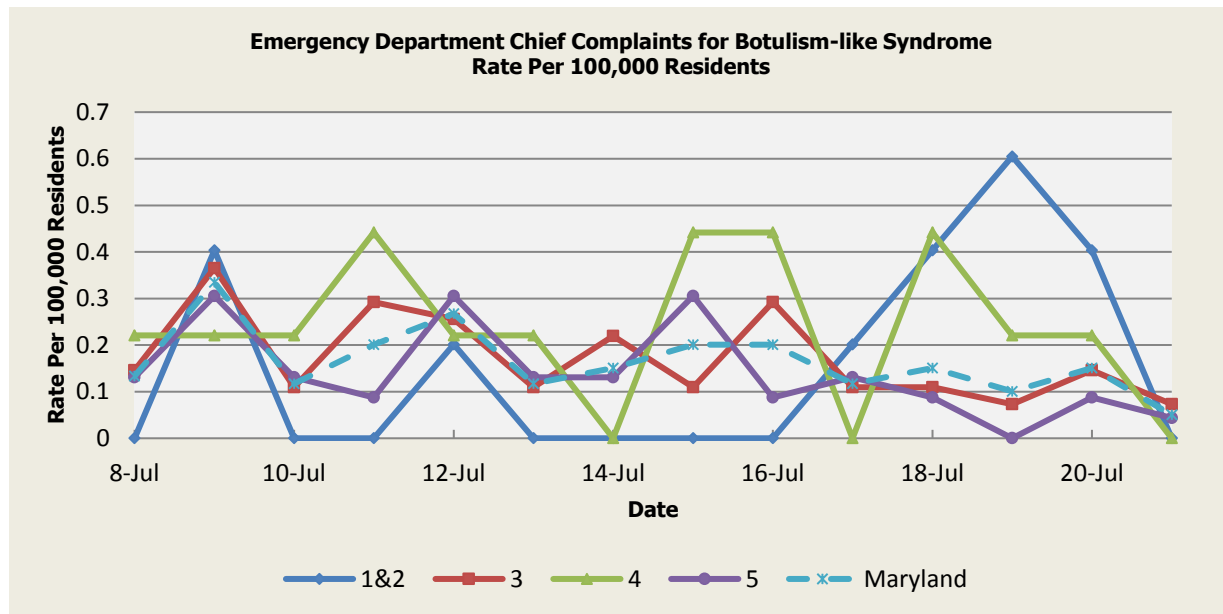
Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.63	0.89	0.79	0.47	0.70
Median Rate*	0.60	0.88	0.66	0.48	0.69

* Per 100,000 Residents

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SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome



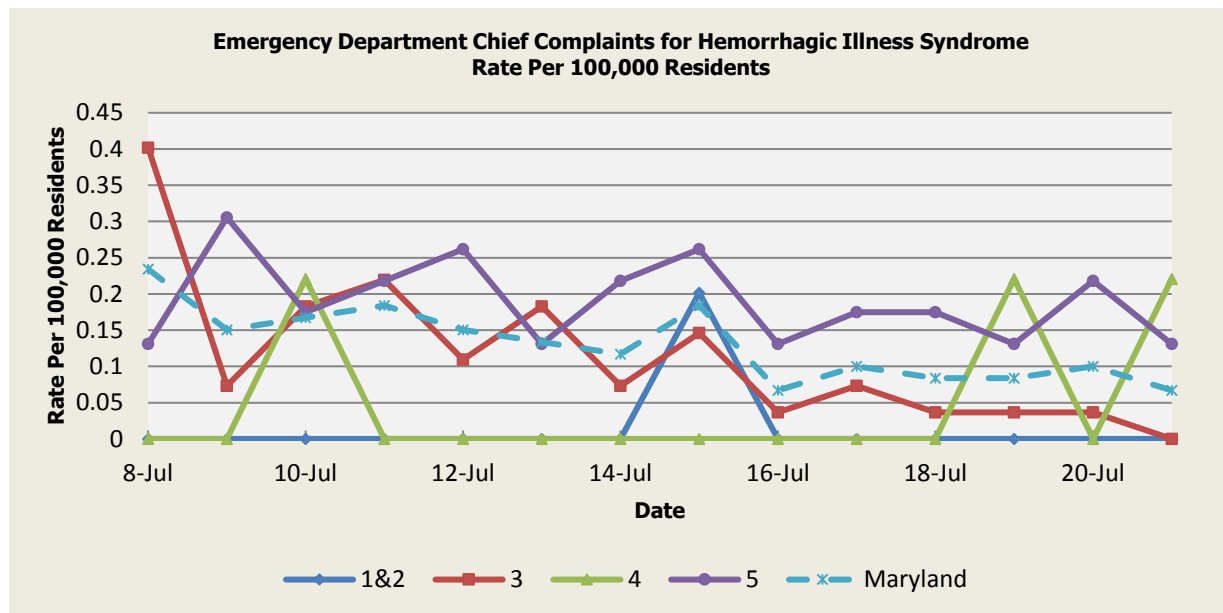
There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 7/8 (Region 4), 7/9 (Regions 1&2,3,4,5), 7/10 (Region 4), 7/11 (Regions 3,4), 7/12 (Regions 1&2,3,4,5), 7/13 (Region 4), 7/15 (Regions 4,5), 7/16 (Regions 3,4), 7/17 (Regions 1&2), 7/18 (Regions 1&2,4), 7/19 (Regions 1&2,4), 7/20 (Regions 1&2,4). These increases are not known to be associated with any outbreaks

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.07	0.11	0.05	0.07	0.09
Median Rate*	0.00	0.07	0.00	0.04	0.07

* Per 100,000 Residents

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Hemorrhagic Illness Syndrome



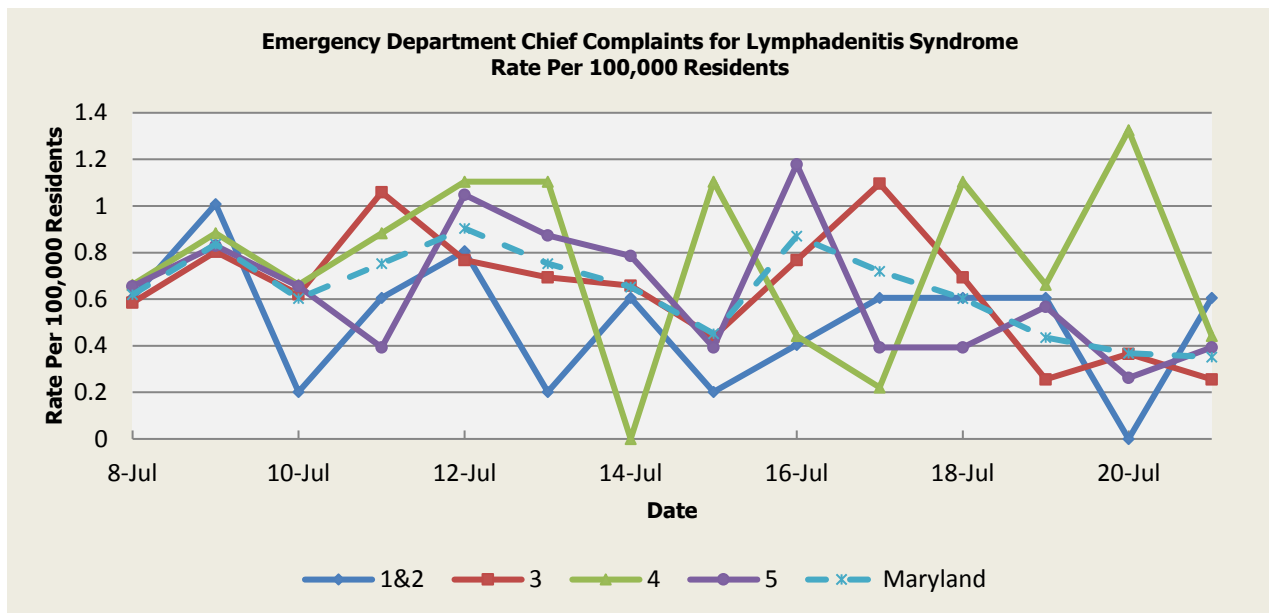
There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 7/8 (Region 3), 7/9 (Region 5), 7/10 (Region 4), 7/12 (Region 5), 7/15 (Regions 1&2,5), 7/19 (Region 4), 7/21 (Region 4). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.14	0.03	0.11	0.11
Median Rate*	0.00	0.07	0.00	0.04	0.07

* Per 100,000 Residents

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Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 7/9 (Regions 1&2,4,5), 7/11 (Region 4), 7/12 (Regions 1&2,4,5), 7/13 (Regions 4,5), 7/14 (Region 5), 7/15 (Region 4), 7/16 (Region 5), 7/18 (Region 4), 7/20 (Region 4). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.05	1.84	2.03	0.93	1.44
Median Rate*	1.01	1.79	1.99	0.92	1.39

* Per 100,000 Residents

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MARYLAND REPORTABLE DISEASE SURVEILLANCE

Condition	Counts of Reported Cases‡					
	July			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2018	Mean*	Median*	2018	Mean*	Median*
Meningococcal disease	0	0.2	0	4	3.2	3
Measles	0	0	0	0	4.6	4
Mumps	0	1.2	1	5	37.8	19
Rubella	0	0	0	1	3.4	3
Pertussis	0	18	19	17	162.4	145
Foodborne Diseases	2018	Mean*	Median*	2018	Mean*	Median*
Salmonellosis	0	94.6	93	39	459	451
Shigellosis	0	13.8	13	19	114	136
Campylobacteriosis	0	75	73	71	442.6	457
Shiga toxin-producing Escherichia coli (STEC)	0	16.4	18	12	88.8	103
Listeriosis	0	3	3	1	9.8	10
Arboviral Diseases	2018	Mean*	Median*	2018	Mean*	Median*
West Nile Fever	0	0.6	0	0	3.4	2
Lyme Disease	0	412.4	412	176	1918.2	1929
Emerging Infectious Diseases	2018	Mean*	Median*	2018	Mean*	Median*
Chikungunya	0	2.2	1	0	8.4	5
Dengue Fever	0	2	1	1	15.6	9
Zika Virus	0	0.6	0	1	2.6	0
Other	2018	Mean*	Median*	2018	Mean*	Median*
Legionellosis	0	19.6	21	16	106.4	109
Aseptic meningitis	0	36.2	29	20	210	208

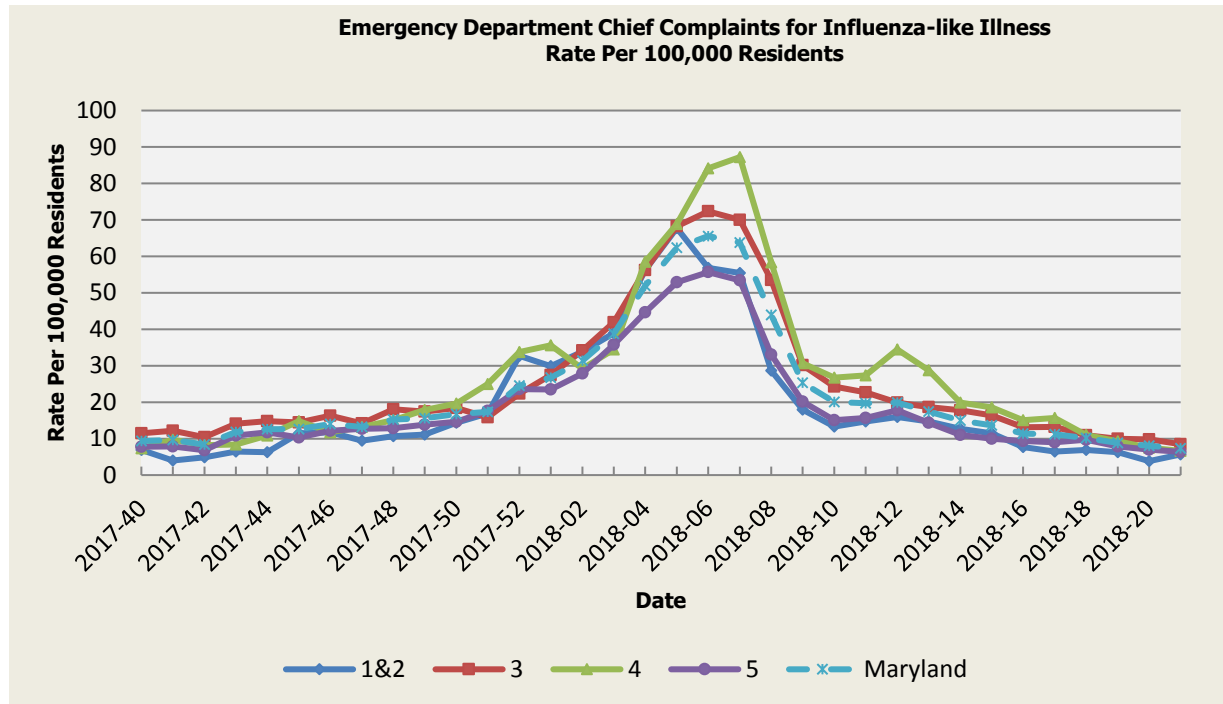
NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health; 2018. ‡ Counts are subject to change *Timeframe of 2013-2017. **Includes January through current month. *** As of July 26, 2018, the total [Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection](#) for 2018 is 5.

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SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May).

Influenza-like Illness

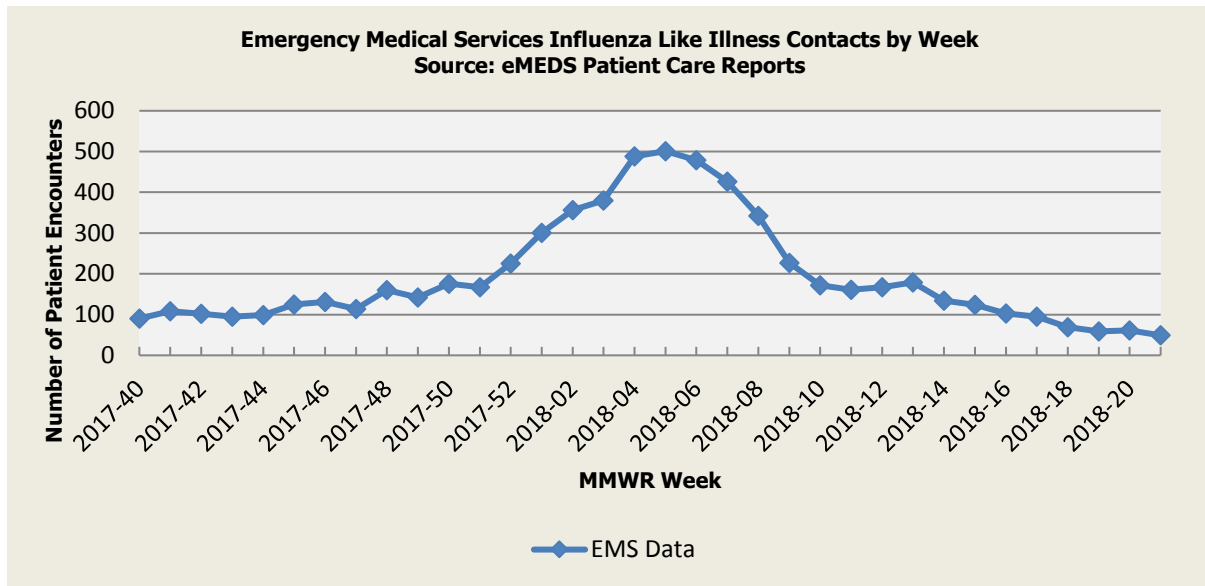


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.34	16.55	15.19	14.31	15.24
Median Rate*	7.66	9.65	9.05	8.45	8.99

* Per 100,000 Residents

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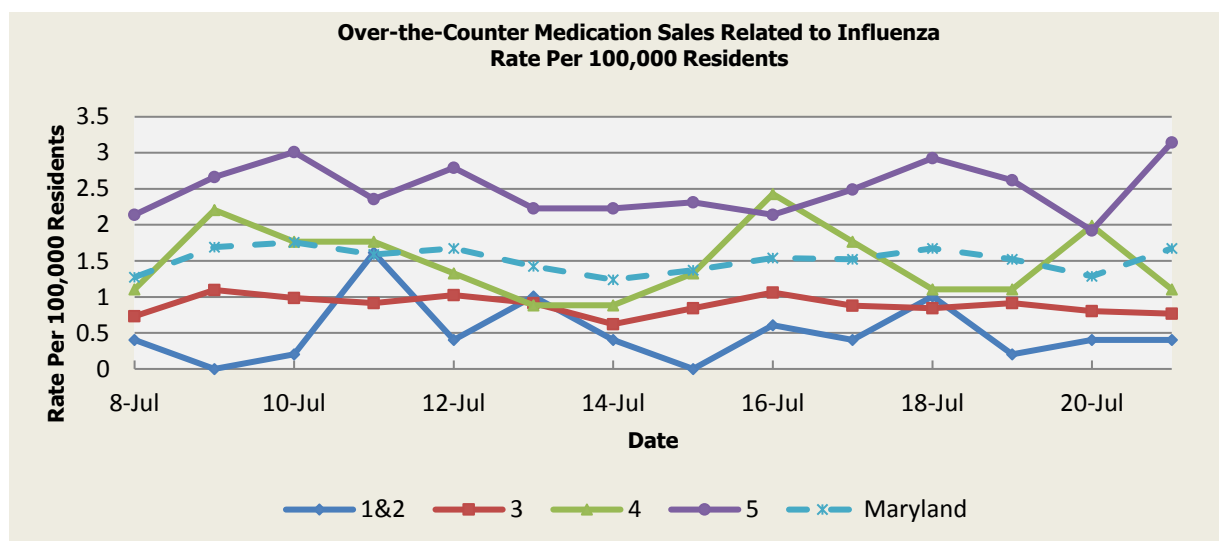
Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected “flu like illness” as a primary or secondary impression of a patient’s illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

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Over-the-Counter Influenza-Related Medication Sales



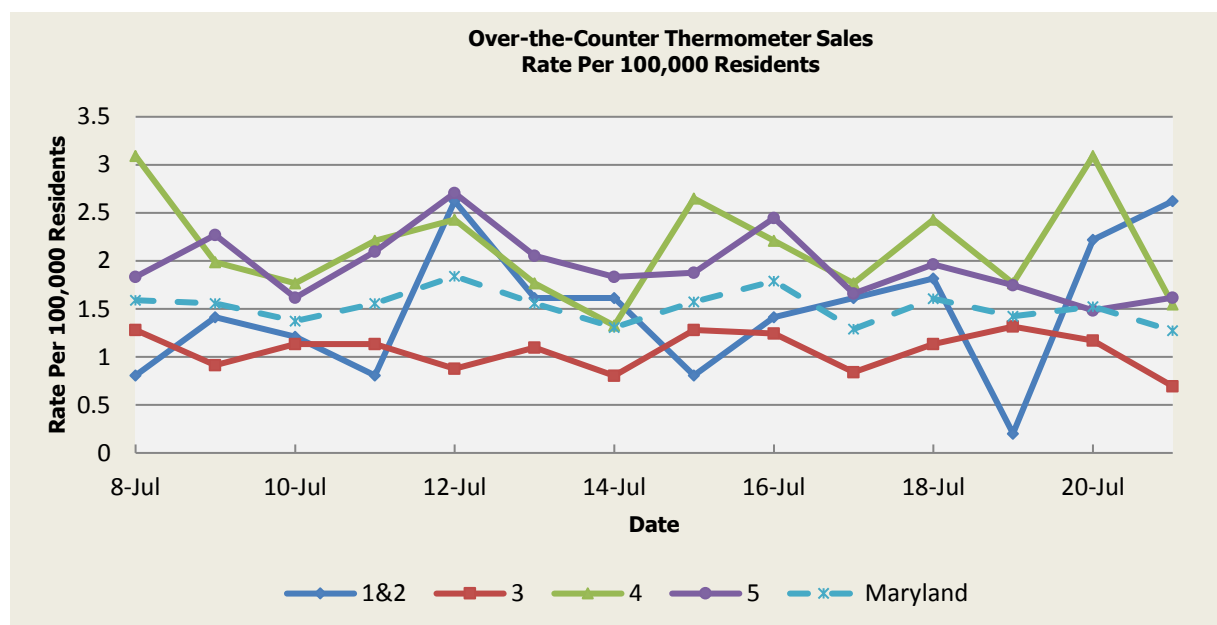
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.69	4.79	2.75	8.24	5.87
Median Rate*	3.02	4.20	2.43	7.73	5.30

* Per 100,000 Residents

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Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.22	3.10	2.42	4.09	3.44
Median Rate*	3.02	2.89	2.21	3.89	3.23

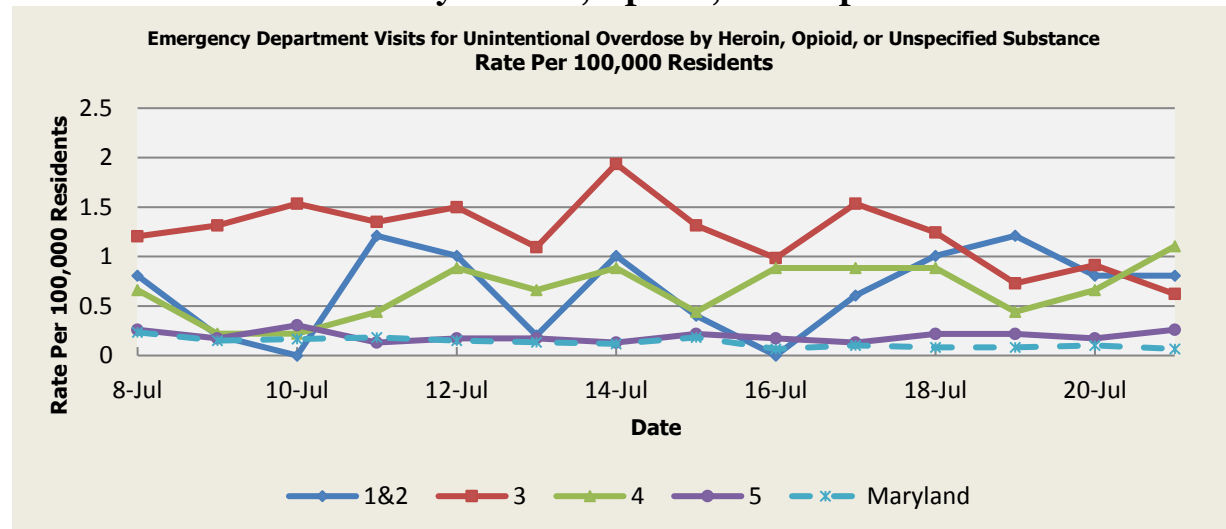
* Per 100,000 Residents

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SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

Unintentional Overdose by Heroin, Opioid, or Unspecified Substance



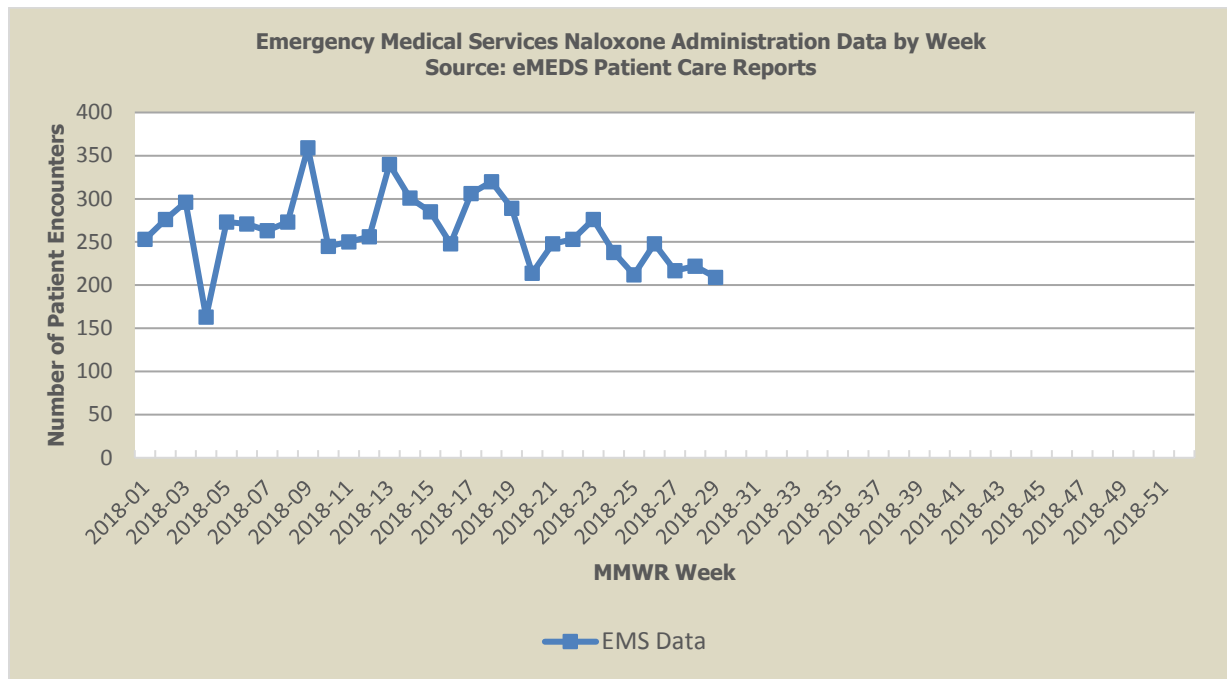
Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcen, and overdose.

Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.28	0.36	0.32	0.13	0.26
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents

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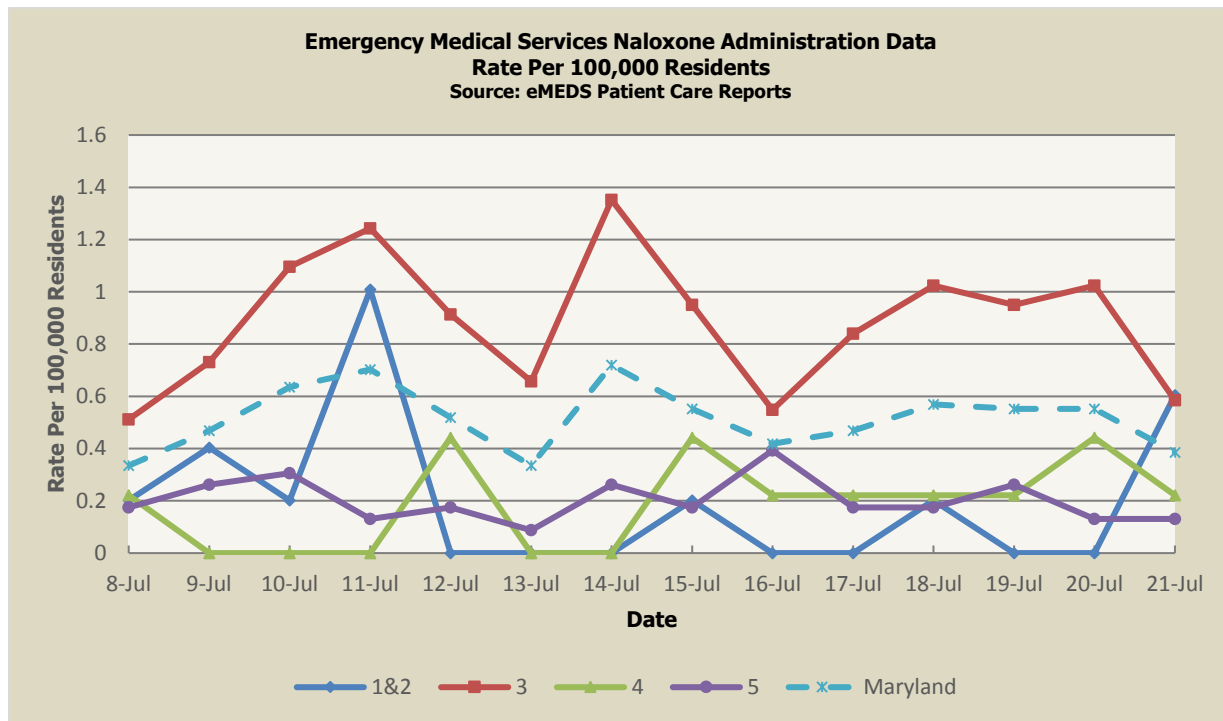
Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

EMS Naloxone Administration Data Baseline Data January 1, 2017 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.28	0.36	0.32	0.13	0.26
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents

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PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of July 27, 2018, the WHO-confirmed global total (2003-2018) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

AVIAN INFLUENZA (SAUDI ARABIA), 22 Jul 2018, The Ministry of Environment, Water and Agriculture on Fri 20 Jul 2018 confirmed one case of avian flu in Al Azizya bird market in Riyadh. The ministry spokesman, Abdullah Abalkhail, said in a statement that the ministry took measures to control the spread of the disease when they detected the 1st case amongst ducks, who are suitable hosts of the ailment. Abalkhail warned bird owners and poultry business personnel to stay away from Al Azizya market until the sterilization period is over and the infection is controlled. Read More: <http://www.promedmail.org/post/5920406>

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week.

NATIONAL DISEASE REPORTS

CYCLOSPORIASIS (MULTISTATE), 25 Jul 2018, CDC [Centers for Disease Control and Prevention], public health and regulatory officials in several states, and the U.S. Food and Drug Administration are investigating a multistate outbreak of Cyclospora infections. At this time, there is no evidence to suggest that this cluster of illnesses is related to the ongoing Cyclospora

outbreak linked to Del Monte fresh produce vegetable trays. Read More:
<http://www.promedmail.org/post/5926980>

SYPHILIS (CALIFORNIA), 23 Jul 2018, The number of syphilis cases in Shasta County is the highest they have ever been. Health professionals are warning sexually active men and women to get tested before they pass the disease on to others. "Very few cases were reported to us for many years but in the last few years syphilis has been really increasing. Syphilis is a sexually transmitted disease. It's become increasingly common here and it's affecting all kinds of people," County Health Officer, Andrew Deckert, said an overwhelming outbreak of syphilis has spread to sexually active men and women in Shasta County. Read More:
<http://www.promedmail.org/post/5920692>

VIBRIO VULNIFICUS (FLORIDA), 20 Jul 2018, A Florida man died from a "flesh-eating" bacterium after eating bad oysters, according to officials. The Florida Department of Health said that the 71 year old man in Sarasota, [Florida], died following his seafood meal on 8 Jul 2018 at a local restaurant. Read More: <http://www.promedmail.org/post/5915557>

INTERNATIONAL DISEASE REPORTS

JAPANESE ENCEPHALITIS (TAIWAN), 26 Jul 2018, The [Taiwan] Centers for Disease Control (CDC) said Tuesday [24 Jul 2018] that 5 people in Taiwan were recently diagnosed with Japanese encephalitis, bringing the number of cases in the country so far this year [2018] to 31. Read More: <http://www.promedmail.org/post/5928387>

TICK-BORNE ENCEPHALITIS (SWITZERLAND), 25 Jul 2018, Tick-borne encephalitis (TBE) cases have significantly increased in 2018, and areas of high risk continue to expand. The Swiss government is considering issuing a nationwide vaccination recommendation against the virus. Almost 230 people have already been infected with the virus -- which in rare cases can be fatal -- since the beginning of 2018, reported Swiss Public Television, SRF, on 24 Jul 2018. Cases have almost doubled compared to last year's figures for the same time period [2017]. Read More: <http://www.promedmail.org/post/5926981>

RIFT VALLEY FEVER (UGANDA), 24 Jul 2018, An outbreak of Rift Valley fever (RVF) was confirmed on 28 Jun 2018. As of 17 Jul 2018, 8 cases (6 confirmed and 2 suspected), including 3 deaths (CFR: 42 percent), were reported from west and central Uganda. The 6 confirmed cases were reported from 5 different districts: one from Kasese, 2 from Isingiro, one from Ibanda, one from Mbarara, and one from Sembabule district. One suspected case, identified on arrival at Mbarara Regional Referral Hospital, ran away from the isolation ward before any further assessment was done. The 2nd is waiting for results and is in the isolation ward. All cases were confirmed by PCR at UVRI (Uganda Virology Research Institute). Read More: <http://www.promedmail.org/post/5925173>

E. COLI EHEC (IRELAND), 22 Jul 2018, A creche (daycare center) in County Galway has been temporarily closed after an outbreak of _E. coli_ that resulted in the hospitalisation of 2 children. The HSE [Health Service Executive] had recently warned of an increase in cases of a

type of E.coli called Verotoxigenic E. coli or enterohemorrhagic E. coli (EHEC). It manifests as a serious form of gastroenteritis that can cause diarrhea, which may be bloody, and abdominal pain. Read More: <http://www.promedmail.org/post/5915568>

TYPHOID FEVER (PAKISTAN), 20 Jul 2018, An antibacterial-defying strain of the bacterium that causes typhoid fever is gaining a foothold in Pakistan, leading some researchers to warn that it could turn the clock back 70 years, when surviving the disease was more a matter of luck than treatment. In the past 6 months, more than 2000 people in Pakistan have been infected with extensively drug-resistant (XDR) Salmonella [enterica serotype] Typhi, according to the National Institute of Health in Islamabad. Only one oral antibacterial, azithromycin, works against the XDR strain, and the other options -- expensive intravenous (IV) drugs -- are impractical for widespread use in Pakistan and other low-income nations. S. Typhi experts worry that the outbreak could soon spill into other countries. Read More: <http://www.promedmail.org/post/5916006>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website:
<http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS):
<http://flusurvey.health.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

